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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,021	10/17/2001	Tsuyoshi Okada	991409A	4269
23850	7590	02/20/2004	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			KASTLER, SCOTT R	
		ART UNIT		PAPER NUMBER
		1742		

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/978,021	OKADA ET AL	
	<b>Examiner</b> Scott Kastler	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 28 January 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-26 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 17 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 09/462,291.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1-20-2004 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over either the admitted prior art of the instant disclosure or the Salvesen article in view of Kuzell, either of DE'205 or Oates et al, and further in view of GB'384. The admitted prior art of the instant disclosure and the Salvesen article both teach that it was well known at the time the invention was made to arrange a steelmaking plant next to a power plant (which could be either coal or oil fired) and a petrochemical complex (an oil refining plant) as well as arranging these plants near waterways (see page 1 of the instant specification for example). Both of the admitted prior art of the instant disclosure and the Salvesen article further teach that it was known at the time the invention was made to deliver waste products from one industrial plant to another industrial plant in order to improve efficiency and reduce environmental impact of the industrial plants as well as

the treatment of any waste materials generated within the complex of plants within the plant complex itself (see page 2 of the instant specification, or pages 1 and 2 of the Salvesen article for example). Both the Salvesen Article and admitted prior art of the instant disclosure thereby shows all aspects of the above claims except the steps of specifically including a cement plant within the industrial complex, delivering products from the plants to locations outside of the complex, or supplying specific waste materials to specific plants within the complex. Kuzell teaches, in the embodiment of the figure for example, that it was well known at the time the invention was made to include a Portland cement plant in a steel making complex in order to efficiently use slag and slag dust products from the steel making facility. DE'205 teaches, in the provided partial translation for example, that sludges from oil refining plants were known to be supplied to a cement plant in order to more efficiently utilize this waste material, while Oates et al teaches, at col. 1 lines 5-65 for example, that cola ash from a coal fired power plant was also known to be employed in cement plants in order to utilize this waste material. GB'384 further teaches that it was a well known expedient at the time the invention was made to include units dealing with the treatment of waste materials within industrial plant complexes themselves (see page 1, lines 12-21 and page 2 lines 60-64 for example), in particular sulfur containing waste gases (see page 6, claim 8 for example). It is further noted by the Examiner to be a well known expedient to deliver products from an industrial plant to locations outside of the plant itself since this is the entire purpose of the plant (production and delivery of products to others ). Because increase in the efficiency and lessening the environmental impact of the industrial plants of the complex of both of the admitted prior art of the instant disclosure and the Salvesen article are expressly desired aims of both the admitted prior art of the instant disclosure and the Salvesen

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article; motivation to include a cement plant in the complex, as shown by Kuzell, as a modification that enables more efficient use of slag and dust generated in a steelmaking process, as well as efficient use of either sludges from an oil refining facility as taught by DE'205 or coal ash from a coal fired power plant as taught by Oates et al, and treatment or use of other waste materials within the industrial complex of the admitted prior art of the instant disclosure itself rather than the shipping of the waste materials to remote locations, as taught by GB'384 in order to further increase efficiency of the industrial complex as a whole, would have been modifications obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-26, that the prior art references do not clearly show or suggest employing at least three different waste products in the cement plant, have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The article by Allen et al and the article titled "By-Product Synergy" are also cited as further examples of multi plant industrial complexes where waste products are exchanged between plants in order to provide for more efficient operation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler  
Primary Examiner  
Art Unit 1742

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